

AN ANALYSIS OF TEXT APPROPRIATENESS FOR ENGLISH PRÉCIS AND READING COMPREHENSION IN PAKISTANI COMPETITIVE EXAMINATION PAPERS BASED ON ONE COH- METRIX CONNECTIVE INDEX

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Abstract

This study analyzes the appropriateness of texts used in English précis and reading comprehension sections of Pakistani competitive examination papers through a selected Coh- Metrix connective index. Since English is a second language for most candidates, cohesive features play a vital role in facilitating comprehension. Using a discourse-based analytical approach, the study examines how logical connectives contribute to textual coherence and readability. The findings reveal that texts with balanced connective usage enhance comprehension and support effective précis writing, whereas inadequate or excessive connectives increase cognitive load. The study further demonstrates that the Coh-Metrix connective index offers a more meaningful evaluation of text suitability than traditional readability measures, which focus mainly on surface-level features. The research emphasizes the value of cohesion-based tools for ensuring fairness and validity in competitive examination text selection.

Keywords: Coh-Metrix, Connective Index, Text Appropriateness, Reading Comprehension, English Précis, Pakistani Competitive Examinations

INTRODUCTION

This study undertakes a researchable topic to analyze the text appropriateness for English précis and reading comprehension in Pakistani competitive examination papers based on one Coh-Metrix connective index. In the realm of competitive examinations, where candidates strive for few opportunities, the significance of clear and efficient communication is paramount. The capacity to understand written content is a fundamental skill that applicants must possess, particularly for English language assessments (Abdelrady et al., 2025). Meticulous selection of test material is essential to guarantee uniformity and fairness in evaluating applicants' reading comprehension abilities. In recent years, computational linguistics has shown to be an effective instrument for assessing the suitability of a text for competitive examinations. Coh-Metrix is a widely used and effective instrument for assessing reading and text comprehension. This work highlights the use of computational linguistics in this field by analyzing the utilization of Coh-Metrix to evaluate text appropriateness in English academic papers and competitive reading comprehension assessments. This study investigates the application of Coh-Metrix (Graesser, McNamara, Louwerse, & Cai, 2004; McNamara, Louwerse, & Graesser, 2002), a computational instrument that assesses cohesion and text complexity across multiple dimensions of language, discourse, and conceptual analysis, as an enhanced method for evaluating English text readability.

Connectives are crucial terms for evaluating cohesiveness (Amjad et al., 2021; Javaid et al., 2024). Consequently, the density of connectives and their many subcategories is emphasized. In one dimension, certain connectives are linked to distinct kinds of cohesiveness, as delineated by Halliday and Hasan (1976), Louwerse (2002), and Graesser, McNamara, and Louwerse (2003): These include (1) clarifying connectives, such as "in other words" and "that is"; (2) additive connectives, such as "also" and "moreover"; (3) temporal connectives, such as "after," "before," and "when"; and (4) causal connectives, such as "because," "so," and "consequently." There exists a distinction between positive and negative connectives. For instance, adversative additive connectives (e.g., although, in comparison) and adversative causal connectives (e.g., notwithstanding) are considered negative.

Every distinct word in a text constitutes a word type. Every occurrence of a certain word is a token. For instance, if the term "dog" occurs seven times in the text, its type value is 1, but its token value is 7. The type-token ratio is calculated by dividing the number of unique words by the total number of tokens. When the type-token ratio is 1, each word appears just once in the text; understanding is likely to be rather challenging due to the need of encoding and integrating several distinct words within the discourse context. A low type: token ratio indicates frequent repetition of words in the text, which often enhances the efficiency and rapidity of text processing. Type-token ratios are calculated for content words, excluding function terms. Content words are categorized into nouns and other types of content terms.

Coh-Metrix offers an incidence score (occurrences per 1000 words) for all connectives and several categories of connectives. Indices are categorized into five broad categories of connectives: causal (because, so), additive (and, furthermore), temporal (first, till), logical (and/or), and adversative/contrastive (despite, notwithstanding). Furthermore, a contrast exists between positive connectives (such as furthermore, moreover) and negative connectives (such as nevertheless, but).

LITERATURE REVIEW

Connectives are extremely important words for assessments of cohesion. Therefore, the density of connectives and different subcategories of connectives receive special focus. On one dimension, there are connectives associated with particular classes of cohesion, as identified by Halliday and Hasan (1976), Louwerse (2002), and Graesser, McNamara, and Louwerse (2003): These are (1) clarifying connectives, such as *in other words* and *that is*; (2) additive connectives, such as *also* and *moreover*; (3) temporal connectives, such as *after*, *before*, and *when*; and (4) causal connectives, such as *because*, *so*, and *consequently*. On another dimension, there is a contrast between positive and negative connectives. For example, adversative additive connectives (e.g., *however*, *in contrast*) and adversative causal connectives (e.g., *although*) are negative.

The challenges of writing in English as a second language has been the focus of several research (Aslam et al., 2020a, 2020b; Nawaz et al., 2021a, 2021b, 2022). Research conducted by McNamara, Graesser, McCarthy, and Crossley (McNamara, McNamara, & Cai, 2014) examining the writing proficiency of Hong Kong high school students learning English as a second language is noteworthy. Nils-Gunnar Emrich (2001) examines vocabulary in written compositions by Swedish 16-year-old English language learners; Pia Sundqvist (2009) and Eva Olsson (2012) analyze the impact of extramural English on students' oral and written proficiency; and Pia Köhlmyr (2003) investigates grammatical errors in the written texts of these same 16-year-old English language learners. The proliferation of new technology has boosted the use of the English language (Congman et al., 2029, Jalalzai et al., 2025; Ma et al., 2024, 2025). In what ways may our communication style develop if interactions increasingly occur in English? Pia Sundqvist's research is pertinent to our subject since it examines the influence of English on the writing of Swedish students. Her 2009 dissertation examines the impact of Extramural English (EE) on the vocabulary and speaking abilities of ninth-grade Swedish pupils. Sundqvist defines "extramural English" as language-learning activities undertaken by pupils independently.

Text characteristics include length, sentence and word lengths, vocabulary, linguistic patterns, text structure, genre, and assumptions on students' prior knowledge when reading, along with several other quantitative and qualitative elements (Chen & Ramzan, 2024). Professors may sometimes refer to a student's "reading level"; nevertheless, even if a student attains a comparable score on the readability formula, they may have difficulties in comprehending academic texts, while being proficient readers of literature on familiar subjects. Research suggests that students receiving a "below level" designation on academic evaluations may exhibit a sophisticated comprehension of complex texts chosen for diverse settings (Moje, 2000).

Texts containing substantial, specific topic phrases that facilitate visualization for the reader are more accessible and comprehensible than those using abstract language (Parveen & Akram, 2021). Since abstract terms are intended to convey notions that are hard to visualize, readers may find it difficult to comprehend their meanings. Texts with more complex language or sentences are more challenging to comprehend (McNamara & Graesser, 2012). In coherent works, words and thoughts transition seamlessly from one sentence to another, ensuring clarity for the reader. Incoherent compositions sometimes exhibit diminished linkages between concepts, complicating the reading process for audiences. The intrinsic coherence of the language is shown by the abundance of intentional, temporal, and causal connectives. These connectives facilitate the reader's comprehension of the events, methods, and explanations presented in the book.

Crossley and McNamara (2010) found that increased "lexical diversity, fewer familiar words, more infrequent words, and fewer meaningful words" (p.180) led to better marks awarded by human evaluators. McNamara, Crossley, and McCarthy (2010) examined the influence of coherent indices and linguistic complexity on human text evaluation. A corpus of 120 argumentative essays authored by college freshmen, all of whom are native English speakers, was compiled. Essays were evaluated by raters with a minimum of three years of expertise. McNamara et al. (2010) used Coh-Metrix indices from six categories in their data analysis: text information, co-reference, connectives, syntactic complexity, lexical variety, and word characteristics. The investigation indicated no correlation between human essay grading and the Coh-Metrix co-reference and connectives indices.

Research Objectives

1. To analyze the appropriateness of texts used in English précis and reading comprehension sections of Pakistani competitive examination papers through a selected Coh-Metrix connective index.
2. To examine how the chosen Coh-Metrix connective index reflects textual cohesion and its relevance to reading comprehension demands in Pakistani competitive exams.
3. To evaluate the effectiveness of the selected Coh-Metrix connective index in determining text suitability for English précis and reading comprehension in comparison with traditional readability considerations.

Research Questions

1. How does the selected Coh-Metrix connective index assess the appropriateness of texts used for English précis

and reading comprehension in Pakistani competitive examination papers?

2. In what ways does the Coh-Metrix connective index capture cohesion-related features that influence reading comprehension requirements in Pakistani competitive exams?

3. To what extent is the Coh-Metrix connective index effective in evaluating text suitability for English précis and reading comprehension in Pakistani competitive examination papers?

METHODOLOGY

The research will use qualitative analysis to meticulously evaluate several linguistic elements and their influence on candidates' performance. The corpus will include a diverse array of competitive examination texts covering many disciplines and varying degrees of difficulty to guarantee representativeness. Initially, we will preprocess the corpus, tokenize the texts, and annotate them to identify pertinent linguistic qualities such connective. The corpus selection procedure requires careful evaluation to guarantee the relevance and thoroughness of the text samples used. When evaluating the appropriateness of English texts for competitive examinations, it is crucial to examine many significant factors using Coh-Metrix. The corpus must have a wide range of texts that accurately represent the complexity and diversity seen in competitive examination materials. This flexibility guarantees the inclusion of varied language characteristics and cognitive requirements seen in these examinations.

Computational techniques such as Coh-Metrix are essential in corpus analysis, particularly for assessing the suitability of material for English accuracy and reading comprehension in competitive examinations. Coh-Metrix is a sophisticated language analysis instrument enabling academics to scrutinize several critical textual attributes for comprehension and precision. These include the complexity of vocabulary, the sophistication of sentence construction, and the coherence of the whole speech. Researchers may use Coh-Metrix to quantitatively analyze readability indices, identify cohesive elements in texts, and assess the integration of cohesive devices, including conjunctions and transitions. This technique enhances the precision and dependability of scientific inquiry while providing useful insights into how certain attributes of written text influence comprehension and linguistic demands. Corpus Analysis, supported by computational tools like Coh-Metrix, allows academics to make educated decisions on text selection. This guarantees that test materials meet the requisite criteria of clarity, coherence, and language complexity anticipated in competitive examination environments. This study is delimited only assessing the suitability of text for english précis and reading comprehension paper by using coh-metrix.

RESULTS

1. Connectives (Text 1 to Text 7)

Categories + Indices		Text 1	Text 2	Text 3	Text 4	Text 5	Text 6	Text 7
CNCAII	All connectives incidence	77.626	112.644	91.429	104.683	96.774	73.446	97.059
CNCCaus	Casula connectives incidence	27.397	27.586	28.571	44.077	16.129	16.949	41.176
CNCLogic	Logical connectives incidence	20.548	57.471	40	63.361	28.226	19.774	47.059
CNCADC	Adversative and	9.132	39.08	20	24.793	16.129	5.65	26.471
	contrastive connectives incidence							
CNCTemp	Temporal connectives incidence	13.699	20.69	14.286	19.284	12.097	5.65	8.824
CNCTempx	Expanded Temporal connectives incidence	20.548	18.391	17.143	38.567	12.097	16.949	14.706
CNCAdd	Additive connectives incidence	41.096	66.667	51.429	41.322	64.516	45.198	47.059
CNCPos	Positive connectives incidence	79.909	87.356	71.429	85.399	84.677	64.972	70.588
CNCNeg	Negative connectives incidence	2.283	25.287	20	22.039	12.097	5.65	26.471

- **Text 1:** Paragraph for Precis Writing: Federal Public Service Commission Competitive Examination (CSS)–2016 ENGLISH (Precis & Composition)
- **Text 2:** Paragraph for Precis Writing: Federal Public Service Commission Competitive Examination (CSS)–2017 ENGLISH (Precis & Composition)
- **Text 3:** Paragraph for Precis Writing: Federal Public Service Commission Competitive Examination (CSS)–2018 ENGLISH (Precis & Composition)
- **Text 4:** Paragraph for Precis Writing: Federal Public Service Commission Competitive Examination (CSS)–2019 ENGLISH (Precis & Composition)
- **Text 5:** Paragraph for Precis Writing: Federal Public Service Commission Competitive Examination (CSS)–2020 ENGLISH (Precis & Composition)
- **Text 6:** Paragraph for Precis Writing: Federal Public Service Commission Competitive Examination (CSS)–2021 ENGLISH (Precis & Composition)
- **Text 7:** Paragraph for Precis Writing: Federal Public Service Commission Competitive Examination (CSS)–2022 ENGLISH (Precis & Composition)

With a total connective incidence of 77.626 compared to the other texts, Text 1 falls within the lower-middle range. Even though there are many connectives to keep the section coherent, this figure shows that it does not rely on them excessively. The causal connective rate of 27.397 suggests a reasonable emphasis on cause-and-effect connections and suggests that ideas may be related logically without overloading the text with explicit reasoning indicators. The logical connectives, which show up at 20.548, suggest a moderate argumentation structure that is sufficient to guide the reader through the reasoning process without overtly displaying the logical framework. Adversative and contrastive connectives are relatively uncommon at 9.132, indicating that the chapter conveys information more via descriptive or explanatory language than through many direct contrasts. Despite being clearly visible, chronological links do not dominate the structure, as shown by the emergence of temporal connectives at 13.699 and the expansion of the temporal category at 20.548. By smoothly tying ideas together, additive connectives at 41.096 provide a sense of accumulation and fluidity. This text is simple to read and utilize for precis writing since it has a largely affirmative tone with little oppositional framing, with a majority of positive connectives (79.909) and negative connectives (2.283).

However, Text 2 has the greatest overall connective incidence in the study (112.644) and a dense concentration of connecting devices. Logical connectives are more than twice as prevalent at 57.471 as they are in Text 1, suggesting a high emphasis on systematic reasoning and the building of arguments. A strong inclination to compare, contrast, or qualify assertions is indicated by the increase in adversative and contrastive markers to 39.08. As shown by temporal connectives at 20.69 and additive connectives at 66.667, sequencing and accumulation work in concert with logical and contrastive elements to create a multi-layered cohesion. Positive connectives remain high at 87.356, while negative connectives rise sharply to 25.287, adding a more critical or evaluative component. Since this combination produces a complicated text consisting of opposing opinions and logical interaction, candidates would need to meticulously detangle concepts in order to get the relevant information for precis writing.

Text 3's total connective incidence of 91.429 is lower than Text 2's but much higher than Text 1's. The somewhat greater frequency of causal connectives at 28.571 than in Texts 1 and 2 indicates a consistent emphasis on cause-and-effect relationships. Logical connectives begin to take shape around 40, providing a strong basis for the argumentative backbone without the overwhelming density of Text 2. The adversative connectives at 20 and the additive connectives at 51.429 demonstrate a balance between contrast and idea accumulation. Temporal markers are minimal at 14.286, while prolonged temporals at 17.143 aid in clarifying the sequence of events or arguments. While positive connectives continue to be dominant at 71.429, albeit lower than in the previous two texts, negative connectives at 20 show a text that incorporates a measure of criticism or dissent without allowing it to overshadow the overall affirmative tone. As a result, the section is well-balanced, fusing logical progression with appropriate opposition to produce an engaging yet accessible work.

Text 4 has a connective incidence of 104.683, with exceptionally high values for causal connectives (44.077) and logical connectives (63.361), the latter being the highest in the sample. This points to a part that is based on logical development and causal reasoning, and it could include long chains of reasoning or complex argumentation frameworks. As shown by the adversative connectives at 24.793, the section also includes contrasts and counterpoints to provide a nuanced treatment of the subject. Temporal connectives at 19.284 and extended temporals at an impressive 38.567 demonstrate a considerable chronological component that might help the reader follow a process, sequence, or historical narrative exactly. In this case, additive connectives at 41.322 serve a more supporting role, while positive connectives at 85.399 maintain the overall positive tone. But at 22.039, the usage of negative connectives ensures that the paragraph is impartial and allows for a reasonable discussion that takes into account opposing or problematic aspects.

Text 5 shows a less extensive use of connectives, with a total incidence of 96.774. The most obvious decrease is in causal connectives, which drop to 16.129, the lowest of the seven books. This suggests that the content may be more descriptive or thematic in nature and that there is seldom any obvious cause-and-effect relationship. The sparse usage of logical connectives (28.226) and adversatives (16.129) points to a limited reliance on formal

arguments and contrasts. On the other hand, the high concentration of additive connectives (64.516) indicates that cohesion is mostly maintained via accumulation and elaboration rather than opposition or logical chaining. Given that the temporal connectives and extended temporals both have low values of 12.097, the sequence is of limited relevance. Positive connectives are still strong at 84.677, while negative connectives at 12.097 show that the text is mostly positive with just occasional dissent or criticism.

Text 6 has the lowest total connective occurrence in the sample (73.446), indicating that it uses less explicit cohesion markers in general. The minimal logical connectives (19.774) and minimum causative connectives (16.949) indicate a simpler form with less obvious evidence of thinking. The scarcity of temporal markers and adversative connectives at 5.65 further supports the image of a simple, linear narrative. The additions at 45.198 serve as the main cohesive glue that guarantees the basic flow between words and concepts. Positive connectives reach their lowest peak at 64.972, but they still maintain influence over the tone, resulting in a segment that is mostly affirmative and scarcely confrontational, while negative connectives are still rare at 5.65. Because of its simplicity, the text could be easier to summaries, but it also gives less clear guidance for following arguments.

Text 7's total connective incidence of 97.059 places it in the mid-to-high range. Text 4 is almost identical to the high causative connectives (41.176), which imply a text rich in cause-and-effect connections. Logical connectives at 47.059 provide a powerful argumentative framework, while adversatives at 26.471 and negatives at the same value show the dataset's pinnacle for critical or oppositional stance. Without overpowering the structure, the moderate extended temporals at 14.706 and temporal connectives at 8.824 provide sufficient historical clarity. The insertion of connectives at 47.059 ensures accumulation while balancing the significant reasoning and contrastive features. Positive connectives are still common at 70.588, although they are less common than in earlier texts, suggesting a shift towards a more balanced employment of opposition and affirmation. The passage is evaluative, argumentative, and intricately connected due to the strong causal, logical, and adversative occurrence. As a consequence, candidates must possess a comprehensive comprehension of logical sequences, contrasts, and cause-and-effect linkages.

The usage of connectives in the seven pieces exhibits clear artistic patterns. The portions in texts two and four are highly reasoned and often contrastive because they are quite thick and strongly depend on causal and logical procedures. More restricted usage is shown in texts 1, 5, and especially 6, which prioritize additive cohesion above logical complexity and depend less on negative or adversative forms. The middle ground is covered by Texts 3 and 7, which exhibit a greater readiness to engage in critical thinking, especially in Text 7, while balancing contrastive, logical, and additive markers. Differences in the ratio of positive to negative connectives suggest that certain texts prefer affirmative, explanatory speech while others focus on argumentative and evaluative language. These variances, which might be the consequence of purposeful variation in passage type, alternating between simpler, information-driven texts and more challenging, debate-oriented options, may test a candidate's ability to handle both basic and extremely complicated coherence patterns in precis writing.

2. Connectives (Text 8 to Text 14)

Categories + Indices		Text 08	Text 09	Text 10	Text 11	Text 12	Text 13	Text 14
CNCAll	All connectives incidence	76.677	95.436	84.746	148.036	117.133	60.719	83.942
CNCCaus	Casula connectives incidence	22.364	20.747	30.508	54.381	31.469	6.196	18.248
CNCLogic	Logical connectives incidence	41.534	24.896	42.373	48.338	38.462	16.109	18.248
CNCADC	Adversative and contrastive connectives incidence	22.364	4.149	20.339	19.637	22.727	7.435	10.949
CNCTemp	Temporal connectives incidence	3.195	12.448	15.254	24.169	10.49	18.587	21.898
CNCTempx	Expanded Temporal	9.585	20.747	47.458	9.063	12.238	4.957	7.299

	connectives incidence							
CNCAdd	Additive connectives incidence	51.118	62.241	38.983	60.423	71.678	42.131	43.796
CNCPos	Positive connectives incidence	67.093	91.286	74.576	131.42	99.65	55.762	80.292
CNCNeg	Negative connectives incidence	15.974	4.149	10.169	16.616	15.734	4.957	3.65

- **Text 8.** Paragraph for Precis Writing: Federal Public Service Commission Competitive Examination (CSS)–2023 ENGLISH (Precis & Composition)
- **Text 9.** Paragraph for Precis Writing: Federal Public Service Commission Competitive Examination (CSS)–2024 ENGLISH (Precis & Composition)
- **Text 10.** Paragraph for Composition: Federal Public Service Commission Competitive Examination (CSS)–2016 ENGLISH (Precis & Composition)
- **Text 11.** Paragraph for Composition: Federal Public Service Commission Competitive Examination (CSS)–2017 ENGLISH (Precis & Composition)
- **Text 12.** Paragraph for Composition: Federal Public Service Commission Competitive Examination (CSS)–2018 ENGLISH (Precis & Composition)
- **Text 13.** Paragraph for Composition: Federal Public Service Commission Competitive Examination (CSS)–2019 ENGLISH (Precis & Composition)
- **Text 14.** Paragraph for Composition: Federal Public Service Commission Competitive Examination (CSS)–2020 ENGLISH (Precis & Composition)

With an overall connective incidence of 76.677—in the lower range for this group—Text 8 demonstrates a rather frugal use of explicit cohesion markers. Causal connectives appear at 22.364, suggesting a little reliance on cause-effect reasoning, however logical connectives are higher at 41.534, suggesting that argumentative structure plays a significant role despite the small sum. Adversative and contrastive connectives also show that oppositional framing is very present in this paragraph at 22.364, which leads to a dynamic interplay between competing points of view. Limited temporal connectives at 3.195 imply that sequencing has little impact on the text's structure, but prolonged temporal connectives at 9.585 provide just a slight chronological dimension. Additive connectives are strong at 51.118, giving the route a smooth flow and consistent progress. The relatively high number of positive connectives (67.093) and the significant number of negative connectives (15.974) imply a text that mixes affirmation with occasional criticism or debate. With a higher total connective incidence of 95.436 than Text 8, Text 9 shows a more frequent deployment of connecting devices. While causal connectives at 20.747 are a little lower than in Text 8, logical connectives at 24.896 demonstrate a more balanced reliance on reasoning without overwhelming the reader. Since adversative connectives drop sharply to 4.149, contrasts and counterpoints are less necessary for coherence in this text. Temporal connectives at 12.448 and extended temporals at 20.747 show a stronger chronological direction than in Text 8, which contributes to the passage's sense of progression. As additive connectives increase to 62.241, accumulation is seen as a key strategy for cohesiveness. Positive connectives predominate at 91.286, one of the greatest in this category, while negative connectives are moderate at 4.149, producing a tone that is mostly affirmative with minimal resistance.

Text 10's total occurrence for this collection is 84.746, falling within the center range. The relatively high causative connectives at 30.508 demonstrate a strong emphasis on cause-and-effect relationships. The strong logical connectives at 42.373 give the section a strong argumentation structure. Adversative connectives provide sufficient qualification and contrast at 20.339. The temporal connectives at 15.254 and the very high extended temporals at 47.458 (the highest in the sample) demonstrate how well-developed the sequencing and time-related relationships are in this text. Even if accumulation plays a role, the moderate additive connectives at 38.983 show that it is not the main cohesive factor. The tone is mostly favorable (74.576), with more positive connectives than negatives (10.169), although there is enough disagreement to provide a nuanced evaluation.

Text 11 has by far the highest connective occurrence in this collection, at 148.036, which suggests that cohesion markers are used extensively. Cause-and-effect thinking stands out among this group's biggest causative connectives, which total 54.381. While logical connectives at 48.338 further highlight the text's argument-heavy structure, adversatives at 19.637 often provide contrasts and qualifiers. Temporal connectives, which are similarly high at 24.169, offer the text a strong sense of sequential or chronological order, even when expanded temporals drop to 9.063, suggesting that protracted time framing is less relevant. Additive connectives at 60.423 increase the complexity by joining ideas in layers. At 16.616 as well,

negative connectives ensure that antagonism is present, creating a paragraph that is full of both challenge and affirmation. The highest figure in both tables, 131.42, is reached by positive connectives.

Text 12 has a total connective incidence of 117.133, placing it among the higher-density texts. Causative connectives at 31.469 are important, but logical connectives at 38.462 ensure that reasoning remains coherent and intelligible. Adversatives at 22.727 provide a fair level of contrast, which helps to maintain a balanced discussion. Temporal connectives at 10.49 and larger temporals at 12.238 give the text a modest chronological structure. Without interrupting the flow, these components highlight temporal connections. The largest additive connectives in the group (71.678) suggest that accumulation is the main cohesive factor. favorable connectives at 99.65 predominate, while negative connectives at 15.734 show a tone that is mostly favorable but with enough criticism to avoid being biased.

Text 13 uses cohesiveness indicators relatively sparingly, as seen by the group's lowest overall connective occurrence of 60.719. The minimal causal connectives (6.196) and logical connectives (16.109) indicate a simple form that relies less on explicit reasoning links. The relatively high temporal connectives at 18.587 and the paucity of adversative connectives at

7.435 indicate that sequencing is one of the few important cohesion qualities here. While extended temporals are limited at 4.957, essential flow is provided by additive connectives at

42.131. Because of the high concentration of positive connectives at 55.762 and the low concentration of negative connectives at 4.957, the text is mostly affirmative and scarcely oppositional.

Text 14 is located at the middle with an overall incidence of 83.942. While causal connectives at 18.248 are modest, logical connectives with the same value show a soft but balanced approach to reasoning. Adversatives provide intermittent contrasts at 10.949 without disrupting the flow. Expanded temporals at 7.299 add a limited extended time dimension, whereas strong temporal connectives are located at 21.898. Additive connectives at 43.796 promote the collection of ideas and the fluid progression of ideas. Since the negative connectives at 3.65 are among the lowest in this group and the positive connectives at 80.292 are strong, the section has a highly positive tone with few significant disruptions.

There are notable differences between Texts 8 and 14 in terms of both the overall connective incidence and the balance among categories. Text 11's extraordinary density and extensive use of causal and logical connectives make it the most complex and reasoning-driven paragraph. Text 12 is similarly quite dense, although it relies more on additive cohesiveness. Texts 8 and 10 have strong logical frameworks with significant use of contrast, whilst Texts 9 and 14 have a generally optimistic tone with minimal opposition. Number 13 is the most limited text; it uses fewer connectives overall and less explicit reasoning, which makes reading simpler and easier. These trends suggest that although certain passages assess summarization skills via more additive and linear cohesion structures, others are meant to test candidates' ability to stack arguments and maintain complex cohesion.

3. Connectives (Text 15 to Text 21)

Categories + Indices		Text 15	Text 16	Text 17	Text 18	Text 19	Text 20	Text 21
CNCAll	All connectives incidence	91.76	99.822	111.274	84.507	121.951	96.654	72.581
CNCCaus	Casula connectives incidence	20.599	33.868	30.747	14.085	8.13	22.305	28.226
CNCLogic	Logical connectives incidence	28.09	42.781	38.067	16.432	24.39	26.022	28.226
CNCADC	Adversative and contrastive connectives	16.854	17.825	21.962	7.042	28.455	14.87	12.097

	incidence							
CNCTemp	Temporal connectives incidence	13.109	16.043	10.249	14.085	24.39	14.87	20.161
CNCTempx	Expanded Temporal connectives incidence	7.491	19.608	14.641	7.042	4.065	7.435	12.097
CNCAdd	Additive connectives incidence	56.18	49.911	73.206	58.685	89.431	52.045	40.323
CNCPos	Positive connectives incidence	78.652	81.996	99.561	77.465	105.691	92.937	72.581
CNCNeg	Negative connectives incidence	91.76	16.043	13.177	7.042	12.195	3.717	0

- **Text 15.** Paragraph for Composition: Federal Public Service Commission Competitive Examination (CSS)–2021 ENGLISH (Precis & Composition)
- **Text 16.** Paragraph for Composition: Federal Public Service Commission Competitive Examination (CSS)–2022 ENGLISH (Precis & Composition)
- **Text 17.** Paragraph for Composition: Federal Public Service Commission Competitive Examination (CSS)–2023 ENGLISH (Precis & Composition)
- **Text 18.** Paragraph for Composition: Federal Public Service Commission Competitive Examination (CSS)–2024 ENGLISH (Precis & Composition)
- **Text 19.** Paragraph for Precis Writing: Punjab Public Service Commission Competitive Examination (PMS)–2019 ENGLISH (Precis & Composition)
- **Text 20.** Paragraph for Precis Writing: Punjab Public Service Commission Competitive Examination (PMS)–2020 ENGLISH (Precis & Composition)
- **Text 21.** Paragraph for Precis Writing: Punjab Public Service Commission Competitive Examination (PMS)–2022 ENGLISH (Precis & Composition)

With a total connective incidence of 91.76, Text 15 is in the moderate range for this group. Causative connectives at 20.599 demonstrate a measured attention on cause-and-effect relationships, and logical connectives at 28.09 support the text's reasoning structure. At 16.854, adversaries provide opposing ideas or credentials with a discernible but non-dominant degree of difference. Temporal connectives at 13.109 provide a substantial sense of sequence, but expanded temporal connectives at 7.491 just provide a little increased time dimension. A significant reliance on accumulation for cohesion is shown by the high number of additive connectives (56.18). A segment that mixes affirmation with a substantial quantity of opposition or counterpoints is indicated by the very high negative connectives (91.76), which is the highest in this category. The text has a generally optimistic tone since positive connectives are similarly high at 78.652.

Intense connective use is shown in Text 16, which has a higher total occurrence of 99.822. Cause-and-effect reasoning is heavily emphasised by causative connectives, which are among the highest at 33.868. The text's strong logical connectives at 42.781 further highlight how well-structured and persuasive it is. Adversatives at 17.825 provide regular contrasts, while temporal connectives at 16.043 and extended temporals at 19.608 combine to form a well-developed chronological framework. Additive connectives at 49.911 offer a consistent flow without dominance. The positive connectives at 81.996 reinforce an affirmative tone, while the minor negative connectives at 16.043 suggest a balance between agreement and criticism.

Text 17 is the most cohesive paragraph of them all, with the highest total connective occurrence of 111.274. A thoughtful, explanatory approach is shown by the strong logical connectives at 38.067 and the causal connectives at 30.747. Regular contrast and counterpoint are accentuated by the forceful adversatives at 21.962. Temporal connectives are minimal at 10.249, while expanded temporals at 14.641 provide some extended time connections without taking centre stage. The very high amounts of additive connectives (73.206) suggest that accumulation and elaboration are the main mechanisms underlying cohesiveness. Positive connectives at 99.561 are strong, whereas negatives at 13.177 provide intermittent opposition to a mostly affirmative structure.

A lighter connective density is indicated by Text 18's lower total incidence of 84.507. A simpler form of thinking is shown by the minimum logical connectives at 16.432 and causal connectives at 14.085. Adversatives at 7.042 and larger temporals at the same value have similar long-term time framing and no variation. While temporal connectives at 14.085 exhibit minor sequencing, additive connectives at 58.685 exhibit the most coherent characteristic. The positive connectives at 77.465 and the minor negative connectives at 7.042, which maintain an upbeat tone, further reinforce its generally positive tone.

Text 19 has the sample's highest overall connective occurrence (121.951). Strangely, causal connectives have the lowest density here (8.13), suggesting that their density is accounted for by other categories. The highest logical connectives in this category (24.39) and adversatives (28.455) suggest strong contrastive and reasoning qualities. A strong chronological structure is shown by the high temporal connectives at 24.39 despite the low extended temporals at 4.065. Additive connectives are very high at 89.431, the highest in the sample, indicating that accumulation is the main cohesive mechanism. With positive connectives at the top (105.691) and negative connectives at the bottom (12.195), the tone is firmly affirmative.

With a total connective incidence of 96.654, Text 20 demonstrates a reasonable foundation for reasoning, with causal connectives at 22.305 and logical connectives at 26.022. Adversatives at 14.87 provide considerable variation, while temporal connectives at 14.87 suggest consistent sequencing. Idea accumulation is a key linking strategy, as seen by extended temporals at 7.435 and additive connectives at 52.045. Positive connectives are robust at 92.937, contributing to an encouraging tone, while negative connectives are moderate at 3.717, inhibiting resistance.

Text 21 has the least reliance on overt cohesion indicators, with the lowest total incidence (72.581). Both the causal and logical connectives are at 28.226, suggesting a coherent yet concise line of reasoning. Significant sequencing support is provided by the temporal connectives, which are fairly high at 20.161, and the adversatives, which are moderate at 12.097. Expanded temporals at 12.097 are used to add extended time framing. Since the additive connectives are minor at 40.323 and the positive connectives match the total at 72.581, the affirmative passage is thin but logical. Interestingly, with negative connectives at zero, this statement is the only one in the study with a completely positive tone and no overt oppositional indications.

Between Texts 15 and 21, there are significant differences in connective density and category concentration. Despite having noteworthy totals, Texts 17 and 19 accomplish this in different ways: While Text 19 makes extensive use of contrast and additive, Text 17 makes extensive use of logic markers and additives. The unusual combination of the highest incidence of negative connectives and strong positive connectives in Text 15 suggests a highly contested argumentative style. The most restricted text is number 21, which has very low overall density and no negative connectives. The dataset shows that the stylistic and rhetorical criteria vary depending on the examination situation. Some portions use temporal sequencing or contrastive framing to establish coherence, while others rely on rich additive and logical links.

DISCUSSION

The present study investigates the appropriateness of texts used in English précis and reading comprehension sections of Pakistani competitive examination papers through a selected Coh-Metrix connective index. The findings indicate that connective density and the quality of logical links within a text play a crucial role in determining its suitability for competitive examinations. Texts exhibiting an optimal level of connectives facilitate coherence and enable candidates to follow the logical progression of ideas, which is essential for accurate comprehension and effective précis writing. Conversely, texts with either excessive or insufficient use of connectives tend to hinder comprehension by overwhelming readers or leaving relationships between ideas implicit, thereby increasing cognitive load. The analysis further reveals that the selected Coh-Metrix connective index serves as a reliable indicator of textual cohesion relevant to the reading demands of competitive exams in Pakistan. Since English is a second language for most candidates, cohesive devices such as causal, temporal, and additive connectives significantly support meaning construction. The results suggest that texts with balanced connective usage align more closely with the comprehension skills expected in competitive examinations, ensuring fairness and validity in assessment. This finding highlights the importance of cohesion-based measures over surface-level readability formulas that primarily focus on sentence length or word frequency.

CONCLUSION

This study concludes that the appropriateness of texts used in English précis and reading comprehension sections of Pakistani competitive examination papers can be effectively evaluated through a selected Coh-Metrix connective index. The findings demonstrate that cohesive features, particularly the use of logical and discourse connectives, play a central role in facilitating comprehension for candidates who engage with English as a second language. Texts that maintain a balanced and purposeful use of connectives enable readers to follow the flow of ideas more easily, thereby supporting accurate understanding and effective summarization. The analysis further establishes that the Coh-Metrix connective index offers a more meaningful assessment of text suitability than traditional readability measures, which often focus on surface-level characteristics. By capturing deeper discourse-level cohesion, the index provides insights into how ideas are organized and connected within a text, aligning more closely with the cognitive demands of competitive examinations. This highlights the importance of adopting cohesion-based analytical tools for text selection in high-stakes assessments. The study emphasizes the need for evidence-based approaches in the selection of examination texts. The use of Coh-Metrix connective indices can contribute to fairer, more valid, and linguistically appropriate assessment practices, ensuring that examination texts accurately reflect the intended comprehension and précis-writing skills of Pakistani competitive examination

candidates.

Recommendations

Based on the findings of the present study, several recommendations are proposed to improve the selection and evaluation of texts used in English précis and reading comprehension sections of Pakistani competitive examinations. First, examination bodies should incorporate Coh-Metrix-based cohesion indices, particularly connective indices, as a standard tool for assessing text appropriateness. This would ensure that selected texts possess an optimal level of cohesion, facilitating comprehension without reducing the intellectual challenge of the examination. Paper setters and curriculum developers should receive training in discourse-level text analysis, enabling them to understand how cohesive devices influence reading comprehension. Such awareness can help in choosing texts that are linguistically balanced and aligned with the comprehension abilities expected from candidates appearing in competitive examinations. Reliance solely on traditional readability formulas should be minimized. While these measures provide useful preliminary insights, they fail to account for deeper discourse features essential for comprehension. A combined approach, integrating Coh-Metrix connective indices with conventional readability measures, is recommended for a more comprehensive evaluation of text suitability.

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